UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/596,486	06/15/2006	Philippe Gentric	FR030155	7269	
65913 NXP , B.V.	7590 12/03/200	9	EXAMINER		
NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ			BLACK, LINH		
1109 MCKAY DRIVE		ART UNIT	PAPER NUMBER		
SAN JOSE, CA	SAN JOSE, CA 95131		2159		
			NOTIFICATION DATE	DELIVERY MODE	
			12/03/2009	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

		Application No.	Applicant(s)			
Office Action Summary		10/596,486	GENTRIC, PHILIPPE			
		Examiner	Art Unit			
		LINH BLACK	2159			
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on <u>20 Ju</u>	lv 2009				
•		action is non-final.				
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	olooca in accordance with the practice and in	x parte gaayle, 1000 G.B. 11, 10	0.0.210.			
Dispositi	on of Claims					
4)🛛	☑ Claim(s) <u>1-3 and 5-20</u> is/are pending in the application.					
4	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
6)🖂	6)⊠ Claim(s) <u>1-3 and 5-20</u> is/are rejected.					
7)						
8)□	Claim(s) are subject to restriction and/or	election requirement.				
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

DETAILED ACTION

This communication is in response to the application filed 7/20/09. Claims 1-20 are pending in the application. Claims 1, 5, 8 and 11 are independent claims.

Claims 12-20 are new claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalra et al. (US 6490627).

As per claim 1, Kalra discloses 3

method of transmitting a multimedia content from a server to a client device through a distribution network upon request of said client device – figs. 12-14: item 400 stream server, items 500s client computers; col. 2, lines 8-17 (transmitting base streams and a desired number of additive streams of digital data from a stream server to a client computer based on a profile obtained from the client computer).

said method using a plurality of groups of at least one set of files, each group

being associated with an encoded multimedia content; said encoded multimedia contents being obtained by encoding said multimedia content with various encoder characteristics – fig. 8a: a slice of five macro-blocks of MPEG data, with each of these macro-blocks containing six blocks...within the first macro-block, the blocks labeled with numbers 1-6 that correspond to the sequence in which data corresponding to these blocks is obtained; col. 23, lines 12-30 (before describing how graphic adaptive streams are encoded and transmitted to a client computer from a server, a dictionary /look-up table, is used both at the server and client, stores information about different characteristics such as geometry, material, texture, and scene graph nodes, each of which have their own particular identifier, data pointer, priority and other characteristic specific attributes...); fig. 2b: item 20 stream management module with data streams of animation 3D & video, audio: classical, rock & roll, easy listening, text: English, French, German...to multimedia devices.

said groups being obtained by slicing said encoded multimedia contents in at least one set of slicing positions; forming slices that can be decoded independently of each other, each file containing a slice of an encoded multimedia content – figs. 5-8b (sequence start, group start, picture start, slice start...); col. 5, line 36 to col. 6, line 59 (...any desired subset of the additive adaptive streams can be transmitted from a server to an end user and subsequently be decoded to reconstruct the video sequence at a resolution that corresponds to the number of additive adaptive streams...After the information for that slice is stored, information relating to the second slice and then subsequent

Art Unit: 2159

n slices of that picture are stored...)

said method comprising: a step of selecting a group from said plurality of groups, a step of selecting a slice **from said slices**; a step of downloading, from said server to said client device – fig. 4: video sequence: pictures: partition picture into slices: slice 28-1, 28-2, 28-3...28-N (a slice can have one or more macro-blocks); figs, 12, 14: stream server, http server, client computers, stream client; col. 4, lines 14-59 (the stream management will obtain a desired resolution profile from a multimedia device and based on the profile, select the appropriate base and additive streams from the available adaptive streams then transmits/downloads these selected streams to the multimedia device, where they are decoded and then displayed for the user to experience).

the file that contains the selected slice and belongs to the selected group **using a communication unit of the client device**, said steps being executed at least once – col. 15, line 57 to col. 16, line 29 (once a user has determined that he desires to view a video sequence using adaptive streams, an adaptive streams program resident within the client computer begins makes a determination of the user profile. This includes a step in which CPU constraint is determined); col. 18, lines 32-65 (in the index file is stored <u>drop frame codes for each adaptive stream, down to the slice level</u>, as well as pointers to the location for each slice of the data for the appropriate data that will be transmitted...at the end of a group code sequence, whether a profile update has occurred is checked in step 554e. If a profile update has occurred, then a new profile is received. If there is not a new

Art Unit: 2159

profile, the a new group code, and corresponding pictures, each with corresponding adaptive streams is transmitted, which operation continues until the end of a sequence).

As per claim 2, Kalra discloses

calculating an estimation of the current transmission rate of the distribution network, wherein said group selection step takes said estimation into account fig. 9a: items 104-124c; col. 7, line 41 to col. 8, line 65; col. 10, line 46 to col. 11, line 35.

As per claim 3, Kalra discloses

transmitting a client preference relating to said encoder characteristics from said client device to said server, and wherein said group selection step takes said client preference into account – col. 16, lines 10-60 (a connection is establish between the adaptive stream server and the particular client computer. Thereafter the profile is sent and after the user makes a selection of the particular sequence that he desires to see/hear and adaptive streams are transmitted in accordance with the user profile thereafter).

As per claim 4, Kalra discloses

a plurality of encoders with various encoder characteristics for encoding a multimedia content, thereby generating a plurality of encoded multimedia contents - col. 4, lines 32-46 (allows for independent operation of encoders and

Art Unit: 2159

adaptive stream processors with respect to the adaptive servers as well as independent operation of decoders on the client computer); col. 8, lines 32-59 (the output from each of the encoders are then input to respective spatial scaling transcoders...audio is also transmitted by the stream management module based upon profile characteristics selected by the user such as whether mono or stereo...); col. 22, lines 19-63.

a plurality of slicers for slicing said encoded multimedia contents in <u>at least one</u> set of slicing positions forming slices that can be decoded independently of each other, and for enclosing each slice of an encoded multimedia content in a file, thereby generating a plurality of groups of at least one set of files, each group being associated with an encoded multimedia content – fig. 4 video sequence: pictures: partition picture into slices (a slice can have one or more macro-blocks); figs. 5-8b (sequence start, group start, picture start, slice start...); col. 4, lines 14-59 (the stream management module will obtain a desired resolution profile from a multimedia device and based upon the profile, select the appropriate base and additive streams from the available adaptive digital data streams then transmits these selected streams to the multimedia device where they are decoded and displayed for the user to experience); col. 6, lines 10-65.

As per claim 5, Kalra discloses

A server having access to a plurality of groups of <u>at least one</u> set of files, each group being associated with an encoded multimedia content, said encoded multimedia contents being obtained by encoding a multimedia content with

Art Unit: 2159

various encoder *characteristics* – col. 2, lines 9-50 (transmitting base streams and a desired number of additive streams of digital data from a stream server to a client computer based on a profile obtained from the client computer... encoding, storing, transmitting and decoding multimedia information in the form of scalable, streamed digital data...each different client computer may access different stream combinations according to a profile associated with each different client computer); col. 15, line 45 to col. 16, line 60.

said groups being obtained by slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other - figs. 5-8b (sequence start, group start, picture start, slice start...); col. 4, lines 14-59; col. 5, line 36 to col. 6, line 59 (...any desired subset of the additive adaptive streams can be transmitted from a server to an end user and subsequently be decoded to reconstruct the video sequence at a resolution that corresponds to the number of additive adaptive streams...After the information for that slice is stored, information relating to the second slice and then subsequent n slices of that picture are stored...)

each file containing a slice of an encoded multimedia content – col. 18, line 32 to col. 19, line 41.

... selecting a slice **from said slices**; ...download the file that contains the selected slice and belongs to a selected group - fig. 4: video sequence: pictures: partition picture into slices: slice 28-1, 28-2, 28-3...28-N (a slice can have one or more macro-blocks); figs, 12, 14: stream server, http server, client computers,

stream client; col. 4, lines 14-59 (the stream management will obtain a desired resolution profile from a multimedia device and based on the profile, select the appropriate base and additive streams from the available adaptive streams then transmits/downloads these selected streams to the multimedia device, where they are decoded and then displayed for the user to experience).

wherein the communication unit is activated at least once upon reception of a request directed to said multimedia content from said client device – col. 15, line 57 to col. 16, line 29 (once a user has determined that he desires to view a video sequence using adaptive streams, an adaptive streams program resident within the client computer begins makes a determination of the user profile. This includes a step in which CPU constraint is determined); col. 18, lines 32-65 (in the index file is stored drop frame codes for each adaptive stream, down to the slice level, as well as pointers to the location for each slice of the data for the appropriate data that will be transmitted...at the end of a group code sequence, whether a profile update has occurred is checked in step 554e. If a profile update has occurred, then a new profile is received. If there is not a new profile, the a new group code, and corresponding pictures, each with corresponding adaptive streams is transmitted, which operation continues until the end of a sequence).

As per claim 6, Kalra discloses

receive information relating to the current transmission rate of the distribution network from said client device, ...to select said group on the basis of said information – fig. 9a: items 104-124c; col. 7, line 41 to col. 8, line 65; col. 10, line 46 to col. 11, line 35.

As per claim 7, Kalra discloses

receive client preference data, and ...select said group on the basis of said client preference data – col. 16, lines 10-60 (a connection is establish between the adaptive stream server and the particular client computer. Thereafter the profile is sent and after the user makes a selection of the particular sequence that he desires to see/hear and adaptive streams are transmitted in accordance with the user profile thereafter).

As per claim 8, Kalra discloses

...select a group of at least one set of files from a plurality of groups, each group being associated with an encoded multimedia content, said encoded multimedia contents being obtained by encoding a multimedia content with various encoder characteristics – fig. 8a: a slice of five macro-blocks of MPEG data, with each of these macro-blocks containing six blocks...within the first macro-block, the blocks labeled with numbers 1-6 that correspond to the sequence in which data corresponding to these blocks is obtained; col. 23, lines 12-30 (before describing how graphic adaptive streams are encoded and transmitted to a client computer from a server, a dictionary /look-up table, is used both at the server and client,

Art Unit: 2159

stores information about different characteristics such as geometry, material, texture, and scene graph nodes, each of which have their own particular identifier, data pointer, priority and other characteristic specific attributes...); fig. 2b: item 20 stream management module with data streams of animation 3D & video, audio: classical, rock & roll, easy listening, text: English, French, German...to multimedia devices.

said groups being obtained by slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other; each file containing a slice of an encoded multimedia content - figs. 5-8b (sequence start, group start, picture start, slice start...); col. 5, line 36 to col. 6, line 59 (...any desired subset of the additive adaptive streams can be transmitted from a server to an end user and subsequently be decoded to reconstruct the video sequence at a resolution that corresponds to the number of additive adaptive streams...After the information for that slice is stored, information relating to the second slice and then subsequent n slices of that picture are stored...)

...send at least one request to said server, said request being directed to said multimedia content and comprising an indication of the selected group – col. 4, lines 14-59 (the stream management will obtain a desired resolution profile from a multimedia device and based on the profile, select the appropriate base and additive streams from the available adaptive streams then transmits/downloads

these selected streams to the multimedia device, where they are decoded and then displayed for the user to experience); col. 18, lines 32-65 (in the index file is stored drop frame codes for each adaptive stream, down to the slice level, as well as pointers to the location for each slice of the data for the appropriate data that will be transmitted...at the end of a group code sequence, whether a profile update has occurred is checked in step 554e. If a profile update has occurred, then a new profile is received. If there is not a new profile, the a new group code, and corresponding pictures, each with corresponding adaptive streams is transmitted, which operation continues until the end of a sequence); col. 24, lines 10-50.

As per claim 9, Kalra discloses

calculate an estimation of the current transmission rate of said distribution network, and to take said estimation into account **of selecting said group** – fig. 9a: items 104-124c; col. 7, line 41 to col. 8, line 65; col. 10, line 46 to col. 11, line 35; col. 22, lines 23-41.

As per claim 10, Kalra discloses

get a client preference, and ... take said client preference into account of selecting said group – col. 16, lines 10-60 (a connection is establish between the adaptive stream server and the particular client computer. Thereafter the profile is sent and after the user makes a selection of the particular sequence

that he desires to see/hear and adaptive streams are transmitted in accordance with the user profile thereafter); col. 22, lines 23-41.

As per claim 11, Kalra discloses

a plurality of encoders with various encoder characteristics for encoding a multimedia content, thereby generating a plurality of encoded multimedia contents - col. 4, lines 32-46 (allows for independent operation of encoders and adaptive stream processors with respect to the adaptive servers as well as independent operation of decoders on the client computer); col. 8, lines 32-59 (the output from each of the encoders are then input to respective spatial scaling transcoders...audio is also transmitted by the stream management module based upon profile characteristics selected by the user such as whether mono or stereo...); col. 22, lines 19-63.

a plurality of slicers for slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other, and for enclosing each slice of an encoded multimedia content in a file, thereby generating a plurality of groups of at least one set of files – fig. 4 video sequence: pictures: partition picture into slices (a slice can have one or more macro-blocks); figs. 5-8b (sequence start, group start, picture start, slice start...); col. 4, lines 14-59 (the stream management module will obtain a desired resolution profile from a multimedia device and based upon the profile, select the appropriate base and additive streams from the available adaptive digital data

streams then transmits these selected streams to the multimedia device where they are decoded and displayed for the user to experience); col. 6, lines 10-65.

each group being associated with an encoded multimedia content, a distribution network - col. 2, lines 9-50 (transmitting base streams and a desired number of additive streams of digital data from a stream server to a client computer based on a profile obtained from the client computer... encoding, storing, transmitting and decoding multimedia information in the form of scalable, streamed digital data...each different client computer may access different stream combinations according to a profile associated with each different client computer); col. 15, line 45 to col. 16, line 60.

a client device connected to a server through said distribution network - figs. 12-14: item 400 stream server, items 500s client computers; col. 2, lines 8-17 (transmitting base streams and a desired number of additive streams of digital data from a stream server to a client computer based on a profile obtained from the client computer).

...send at least one request to said server, said request being directed to said multimedia content - col. 4, lines 14-59 (the stream management will obtain a desired resolution profile from a multimedia device and based on the profile, select the appropriate base and additive streams from the available adaptive streams then transmits/downloads these selected streams to the multimedia device, where they are decoded and then displayed for the user to experience);

col. 18, lines 32-65 (in the index file is stored drop frame codes for each adaptive stream, down to the slice level, as well as pointers to the location for each slice of the data for the appropriate data that will be transmitted...at the end of a group code sequence, whether a profile update has occurred is checked in step 554e. If a profile update has occurred, then a new profile is received. If there is not a new profile, the a new group code, and corresponding pictures, each with corresponding adaptive streams is transmitted, which operation continues until the end of a sequence); col. 24, lines 10-50.

a server having access to said plurality of groups - col. 2, lines 9-50 (transmitting base streams and a desired number of additive streams of digital data from a stream server to a client computer based on a profile obtained from the client computer... encoding, storing, transmitting and decoding multimedia information in the form of scalable, streamed digital data...each different client computer may access different stream combinations according to a profile associated with each different client computer); col. 15, line 45 to col. 16, line 60.

...select a slice **from said slices**; b)...download the file that contains the selected slice and belongs to a selected group – fig. 4: video sequence: pictures: partition picture into slices: slice 28-1, 28-2, 28-3...28-N (a slice can have one or more macro-blocks); figs, 12, 14: stream server, http server, client computers, stream client; col. 4, lines 14-59 (the stream management will obtain a desired resolution profile from a multimedia device and based on the profile, select the

appropriate base and additive streams from the available adaptive streams then transmits/downloads these selected streams to the multimedia device, where they are decoded and then displayed for the user to experience).

wherein the second communication unit is activated at least once upon reception of a request directed to said multimedia content from said client device - col. 15, line 57 to col. 16, line 29 (once a user has determined that he desires to view a video sequence using adaptive streams, an adaptive streams program resident within the client computer begins makes a determination of the user profile. This includes a step in which CPU constraint is determined); col. 18, lines 32-65 (in the index file is stored drop frame codes for each adaptive stream, down to the slice level, as well as pointers to the location for each slice of the data for the appropriate data that will be transmitted...at the end of a group code sequence, whether a profile update has occurred is checked in step 554e. If a profile update has occurred, then a new profile is received. If there is not a new profile, the a new group code, and corresponding pictures, each with corresponding adaptive streams is transmitted, which operation continues until the end of a sequence).

As per claims 12, 15, 18, Kalra discloses selecting a most recent slice or a closest future slice to ensure continuity in transmitted multimedia content – fig. 7a: sequence start, picture start, next picture pointer etc...; col. 6, lines 17-65 (associated with each picture start code

is picture header information including a next picture pointer...so that any desired subset of the additive adaptive streams can be transmitted from a server to an end user and subsequently be decoded to reconstruct the video sequence at a resolution that corresponds to the number of streams that have been transmitted); col. 18, lines 32-45.

As per claims 13-14, 16-17, 19-20, Kalra discloses

comparing the time of arrival of the request of said client device with slicing positions of a single set of slices; determining the most recent slice and/or the closest future slice from the single set of slices based on the comparing – col. 15, line 57 to col. 16, line 29.

Response to Arguments

Applicant's arguments filed 7/20/09 have been fully considered but they are not persuasive. Regarding the Applicant's argument that Kalra fails to disclose "said groups being obtained by slicing said encoded media contents in at least one set of slicing positions forming slices that can be decoded independently". Examiner disagrees.

Kalra discloses "With respect to the video sequence, each of the "pictures" in the video sequence can be formatted in a variety of different ways, depending upon which video format is used. If the format is an MPEG format...For any of the I, P, or B pictures, such a picture will be partitioned into a plurality of slices - col.

5, lines 4-23; fig. 16c, items 656-664 describe steps "Receive slice start code", "Receive MPEG slice headers", ... "New slice start code?" Therefore, each slide is encoded and thus decoded independently.

Kalra also discloses "virtual channels allows for INDEPENDENT operation of encoders and adaptive stream processors as described hereinafter with respect to the adaptive servers, as well as independent operation of decoders on the client computer" - col. 4, lines 39-45. Kalra discloses frames of different types: I, P, and B - fig. 9c, items 206-208.

Applicant, in the specification, page 5, lines 27-32 that "In order to produce slices that can be decoded independently of each other, the slicing positions are chosen to be such that each slice starts with a Random Access Point. For instance, when the encoders are compliant with the MPEG-2 or MPEG-4 standard, the random access points are the I-frames of the MPEG-encoded multimedia contents, and the slicing positions are chosen in such a way that the first frame of each slice is an I-frame".

However, the claims' limitations are broad and although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on Mon.-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trujillo can be reached on 571-272-3677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public Application/Control Number: 10/596,486 Page 19

Art Unit: 2159

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Trujillo/ Supervisory Patent Examiner, Art Unit 2159 LINH BLACK Examiner Art Unit 2159